

State of California
Regional Water Quality Control Board
San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT
April 9, 2003

ITEM: 10

SUBJECT: Status Report on the progress of the County of Orange and the City of Laguna Niguel to comply with Cleanup and Abatement Order No. 99-211 for discharges of high fecal bacteria from storm drain outfall "J03P02" (Jeremy Haas)

PURPOSE: The purpose of this item is to provide an update to the Regional Board on fecal bacteria cleanup and abatement activities in the J03P02 drainage area. No Regional Board action on this item is necessary.

PUBLIC NOTICE: The public was notified of this item in the agenda notice for today's meeting, which was mailed on March 21, 2003.

DISCUSSION: In December 1999 the Regional Board issued Cleanup and Abatement Order No. 99-211 to the County of Orange, Orange County Flood Control District and City of Laguna Niguel requiring the three agencies to cleanup and abate the effects of elevated bacteria discharges from the J03P02 storm drain, which discharges to Sulphur Creek near the confluence with Aliso Creek. The Order also required the three agencies to conduct weekly monitoring and to develop a workplan to cleanup the wastes. Since October 2001 the CAO 99-211 reports have been embedded in quarterly progress reports for the Aliso Creek monitoring Directive (see item 9).

Following issuance of Cleanup and Abatement Order No. 99-211, source identification efforts suggested that wildlife and pet waste, organic soil amendments, turfgrass, and organic debris in the gutters and storm drain system are the most likely bacterial culprits. The copermittees have also conducted a series of laboratory tests to determine the source(s) of bacteria. These limited tests demonstrated that cow-based bacteria, attributed to organic fertilizers, was a significant source.

The agencies have addressed the fecal coliform problem by implementing municipal actions, including public education, weekly street sweeping, periodic catch basin cleanouts, wastewater line inspections, and structural treatment BMPs. The end-of-pipe

structural treatment practices have effectively eliminated the discharge of bacteria to Sulphur Creek from J03P02 during dry weather. This has been accomplished by a mobile ultraviolet treatment plant and diversions to the sanitary sewer when the UV plant is not operational.

A long term treatment BMP consisting of a network of three constructed wetlands will be completed in the next few months. Funding for the final phase of construction has been provided in part through a contract with the State Water Resources Control Board (SWRCB) pursuant to the Costa-Machado Water Act of 2000 (Proposition 13). As proposed, the three constructed wetland sites would treat all dry-weather urban runoff and minor stormwater runoff in the J03P02 drainage area. Preliminary results from weekly testing suggest that the wetlands will be capable of eliminating over 90% of fecal coliform. Large storms would bypass the majority of the constructed wetland sites. Upon completion of the constructed wetlands, the agencies plan to remove the ultraviolet treatment plant. Provided the wetlands meet performance expectations and the City continues its efforts to identify and eliminate illicit discharges and to promote pollution prevention and source reduction measures in accordance with the MS4 Permit, the Regional Board should consider rescission of the CAO.

LEGAL CONCERNS: None

SUPPORTING DOCUMENTS:

1. Map of J03P02 drainage area and location of constructed wetlands
2. Preliminary data from the East constructed wetland in the J03P02 drainage area
3. Cleanup and Abatement Order No. 99-211

RECOMMENDATION: This is an informational item only.